

WARM-UP!

Graph in slope-intercept form:

1. $y = \frac{2}{3}x + 1$

$m = \frac{2}{3}$

$b = 1$

2. $y = 5$

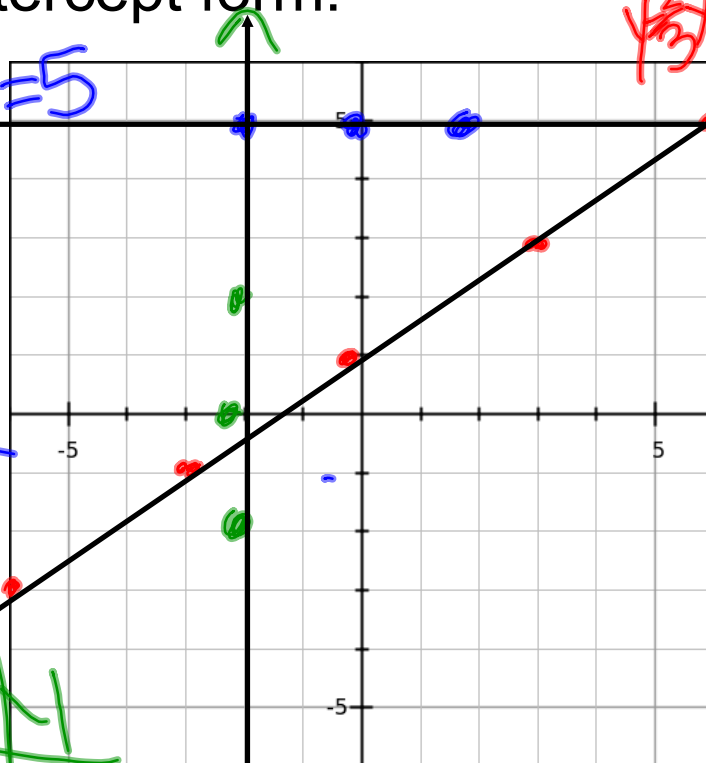
$m = 0$

$b = 5$

3. $x = -2$

$m = \text{undefined}$

$b = \text{none}$



Solving Linear Systems by Graphing

Linear System: 2 equations that relate

$$\begin{cases} 3x + 2y = 4 \\ -x + 3y = -5 \end{cases}$$

When you solve a linear system, your solution is the point where the two linear equations intersect.

Edit Reset ?

Solving a linear system by graphing

- 1 Write equations in $y = mx + b$
- 2 Graph both equations
- 3 Estimate the point of intersection
- 4 Write the intersection point as an ordered pair...This is the solution!
- 5 both equations. Ordered pair must be a solution to both equations to be a solution to the system.

Solve the system by graphing. Check answers algebraically.

1. $y = 5$

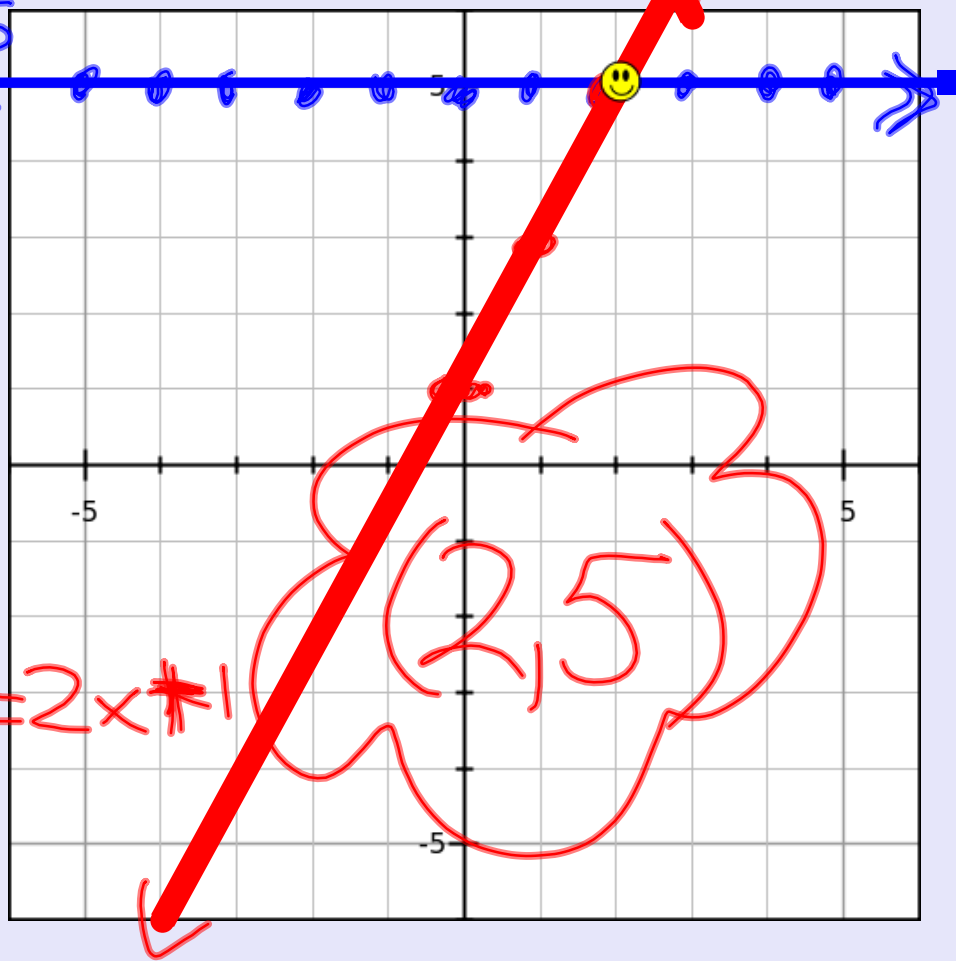
$y = 2x + 1$

$m = 2$

$b = 1$

x	y
-2	5
0	5
2	5

$y = 2x + 1$



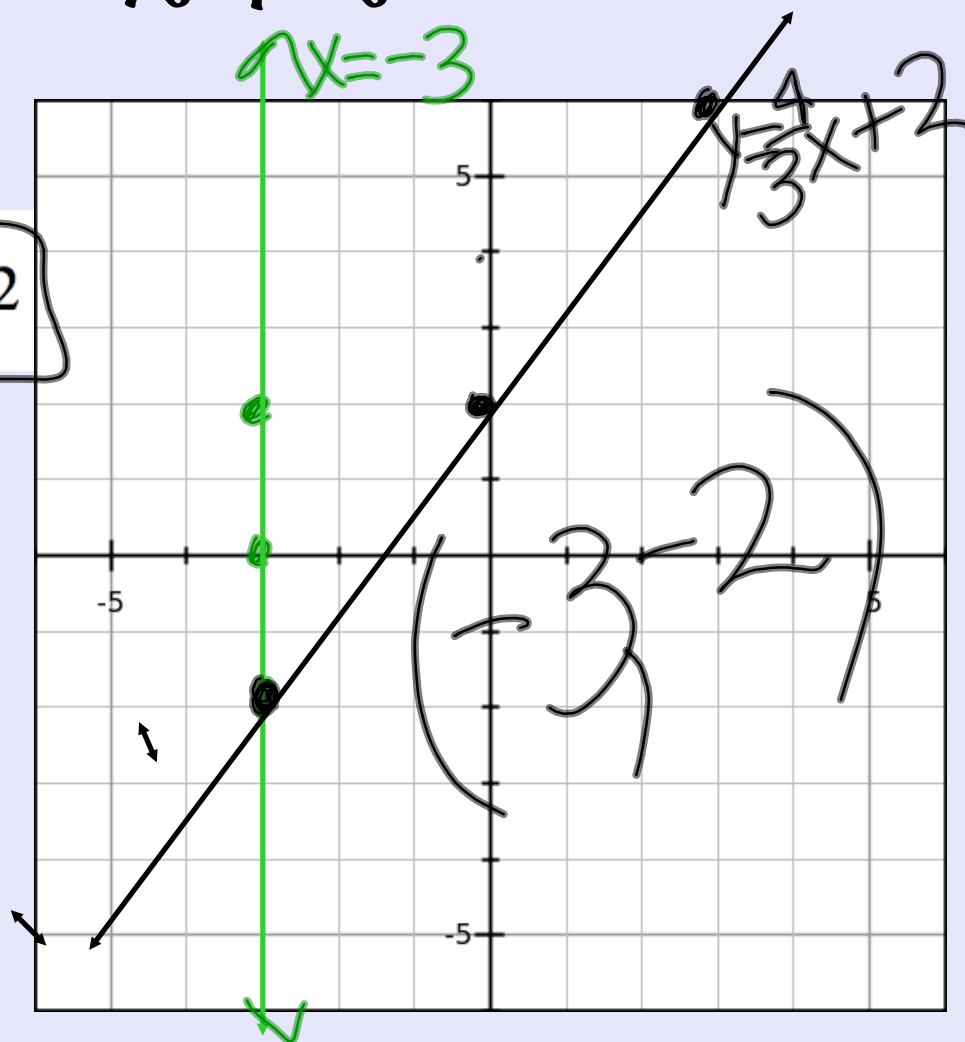
Solve the system by graphing. Check answers algebraically.

2. $x = -3$

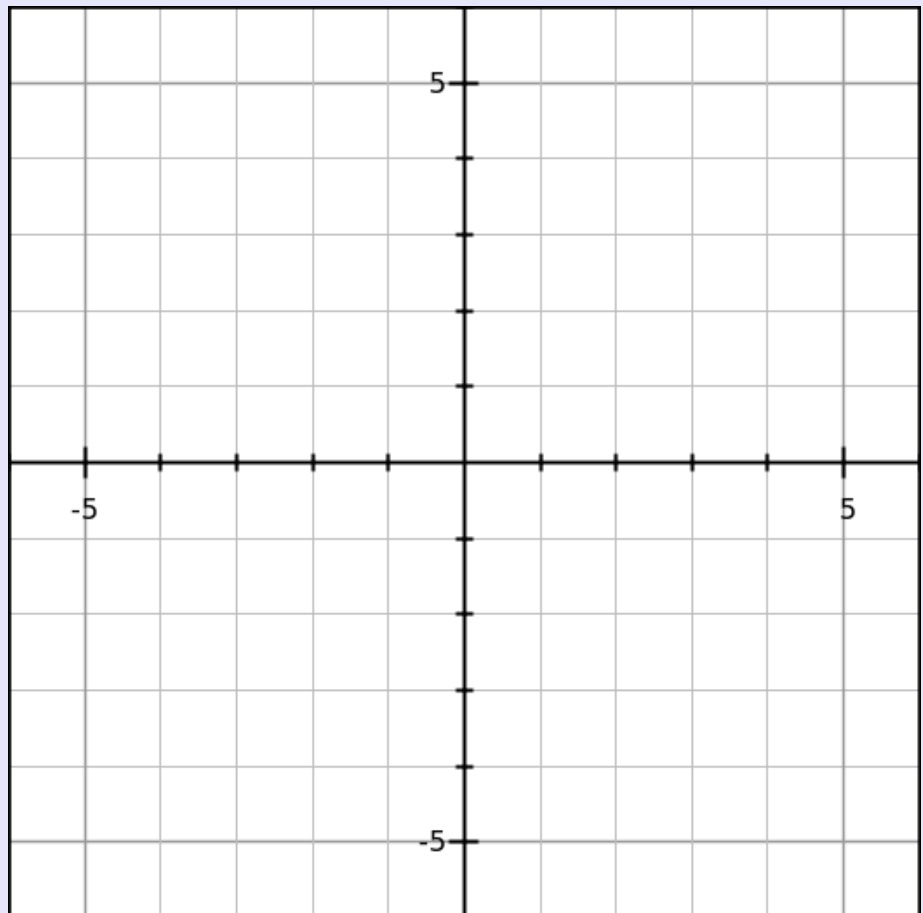
$$y = \frac{4}{3}x + 2$$

$$m = \frac{4}{3}$$
$$b = 2$$

x	y
3	-2
3	0
3	2



3. $y = \frac{2}{5}x - 3$
 $y = -\frac{3}{5}x + 2$



4. $y = -x + 6$

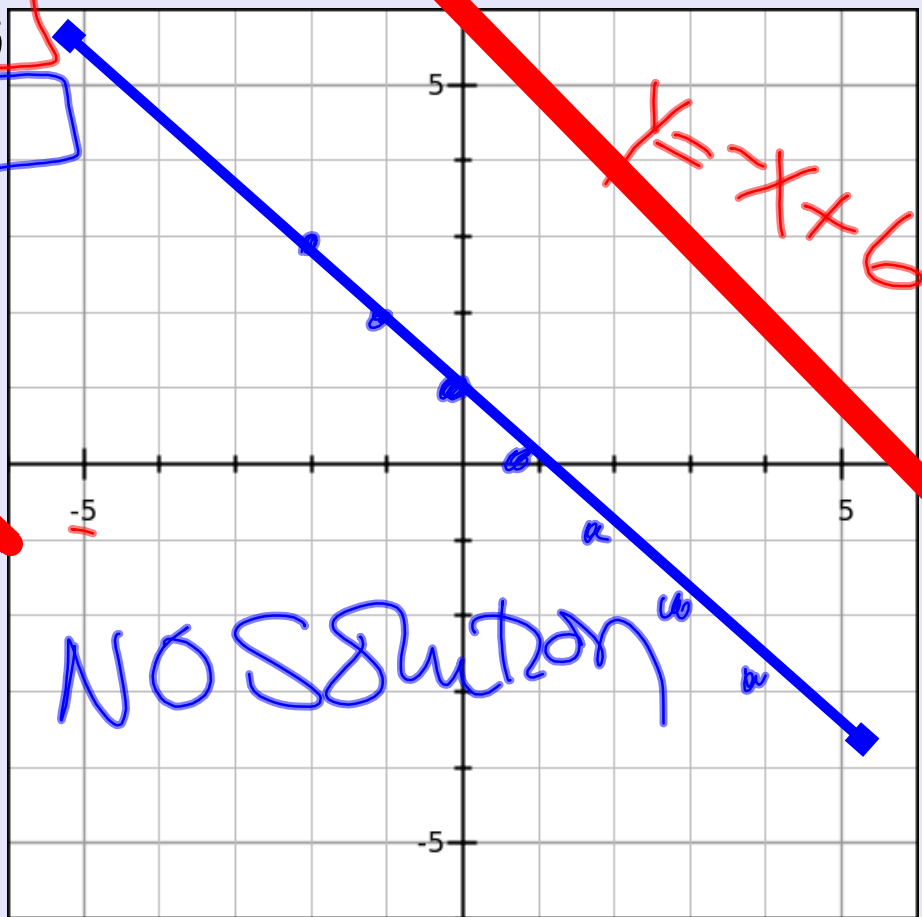
$y = -x +$

$m = -\frac{1}{1}$

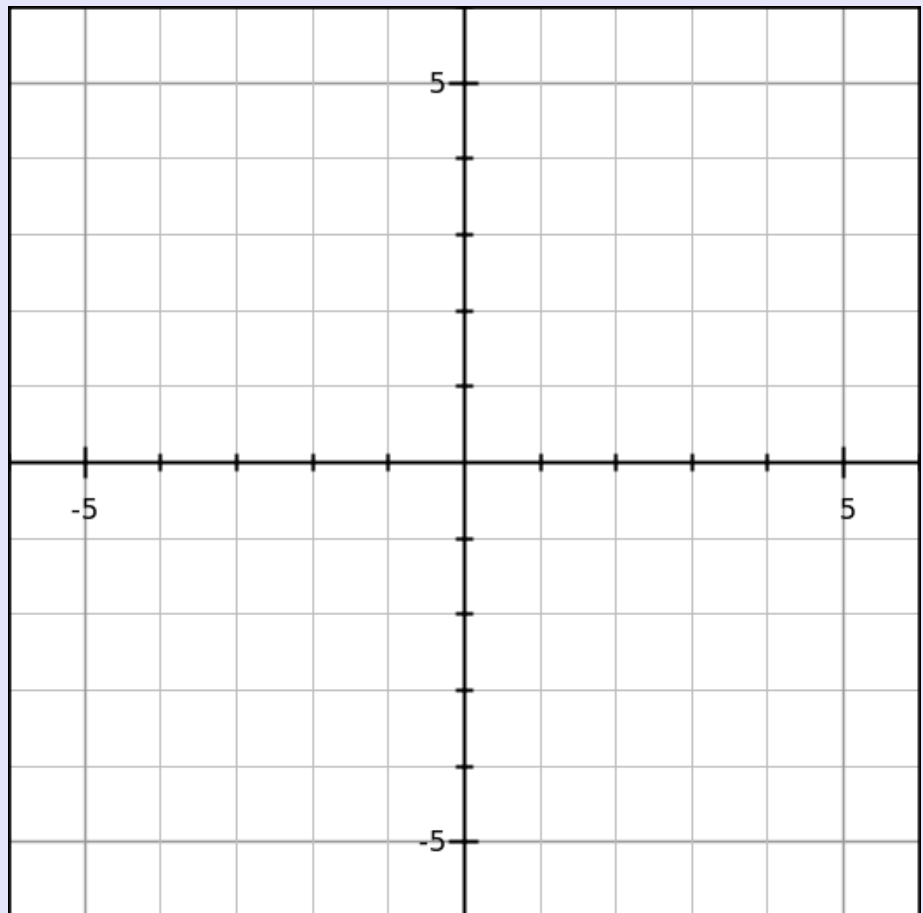
$b = 6$

$m = -\frac{1}{1}$

$b = 1$

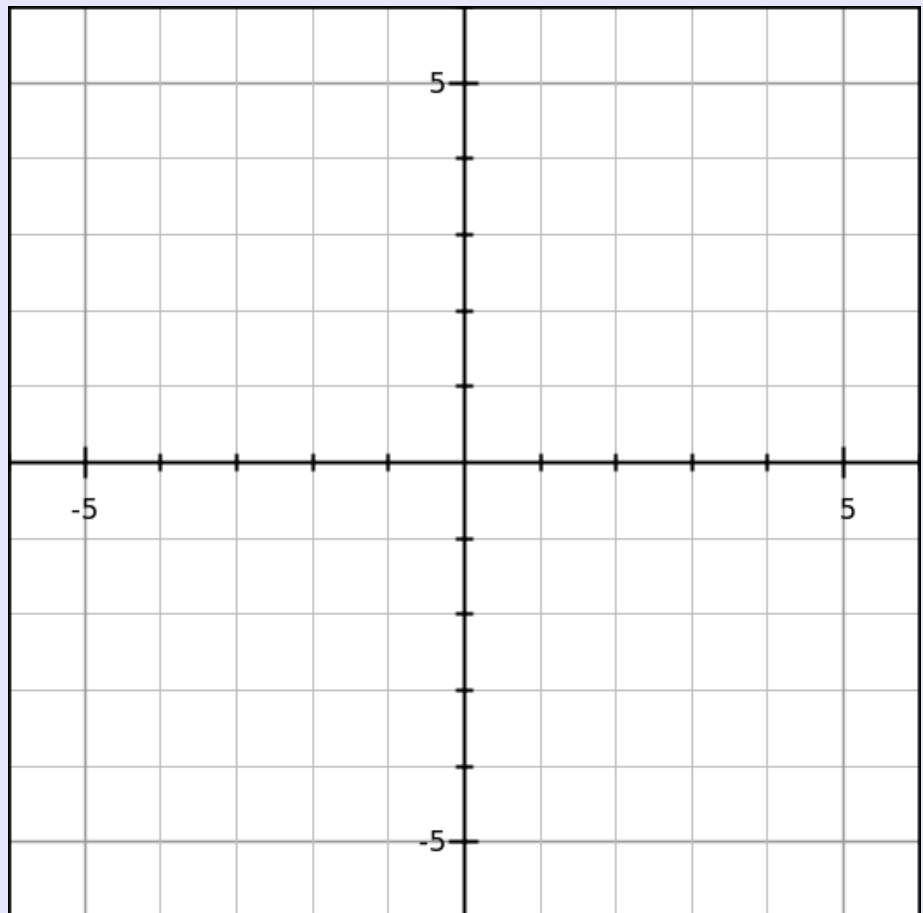


5. $y = -2x + 4$
 $y = 2$



6. $y = -x - 6$

$y = \frac{2}{3}x - 1$



HOMEWORK!